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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,944	01/28/2002	Tetsuyuki Miwa	111815	2705
25944	7590	09/19/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			SZMAL, BRIAN SCOTT	
			ART UNIT	PAPER NUMBER
			3736	

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,944

Applicant(s)

MIWA ET AL.

Examiner

Brian Szmaj

Art Unit

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-15 is/are allowed.
- 6) ☐ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4-17-02; 5-1-02
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 4-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Grolman et al (3,572,100).

Grolman et al disclose a synchronizer for a tonometer and further disclose fluid blowing means which blows fluid against a cornea of an eye of an examinee; intraocular pressure measurement means which detects a deformed state of the cornea caused by the blown fluid and determines intraocular pressure of the examinee's eye based on a result of detection of the deformed state; pulsation detection means which detects pulsation of the examines; measurement timing determination means which can determine a measurement timing based on the detected pulsation to obtain a predetermined number of results of measurement on the intraocular pressure in synchronization with different phase points in the pulsation; command signal input means which inputs a command signal for execution of the measurement; control means which outputs a control signal for controlling driving of the fluid blowing means based on the determined measurement timing and the input command signal; mode selection means which selects one of a first mode of obtaining a measurement result in the measurement timing corresponding to a peak point, a bottom point, or an arbitrary point in the pulsation phase and a second mode of obtaining a predetermined number

of results of measurement in the measurement timing corresponding to the peak point and the bottom point respectively, and wherein the measurement timing determination means determines the measurement timing based on the selected mode; fluid blowing means which blows fluid against a cornea of an eye of an examinee; intraocular pressure measurement means which detects a deformed state of the cornea caused by the blown fluid and determines intraocular pressure of the examinees' eye based on a result of detection of the deformed state; pulsation detection means which detects pulsation of the examinee; measurement timing determination means which determines a measurement timing to obtain a predetermined number of results of measurement on the intraocular pressure in synchronization with an intended phase point in the pulsation, the determination means determining a measurement timing based on a pulsation previously detected and sampled; command signal input means which inputs a command signal for execution of the measurement; and control means which outputs a control signal for controlling driving of the fluid blowing means based on the determined measurement timing and the input command signal; the pulsation detection means detects and samples pulsation within a first detection time for a predetermined time or a predetermined number of periods of the pulsation, and the measurement timing determination means determines the measurement timing corresponding to pulsation occurring after the first detection time based on the sampled pulsation; the pulsation detection means successively detects and samples the pulsation even after the first detection time, and when another pulsation is newly detected and sampled within a second predetermined detection time after the first detection time, the

measurement timing determination means determines the measurement timing corresponding to the pulsation occurring after the first detection time based on the newly sampled pulsation; prediction means which predicts a deformation detection time required from output of the control signal until a predetermined corneal deformed state is detected, wherein the measurement timing determination means determines the measurement timing based on the predicted deformation detection time; the measurement timing determination means determines at least two measurement timings, one being a first measurement timing corresponding to first pulsation and the other being a second measurement timing corresponding to second pulsation occurring after the first pulsation, based on a sampling result on the pulsation that occurred earlier than the first pulsation; and the measurement timing determination means determines the measurement timing based on the previously detected and sampled pulsation when no pulsation is detected by the pulsation detection means. See Column 2, lines 59-68; Column 3, lines 17-62; and Column 5, lines 3-14.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grolman et al (3,572,100) as applied to claim 1 above, and further in view of Nishio et al (5,092,334).

Grolman et al, as discussed above, disclose a synchronizer for use with a tonometer, but fail to disclose the measurement timing determination means determines the measurement timing based on at least a peak point and a bottom point in the pulsation phase, and the intraocular pressure measurement means calculates an average value of a measurement value in a first measurement timing corresponding to the peak point and a measurement value in a second measurement timing corresponding to the bottom point; and output means which outputs the measurement value obtained in the first measurement timing, the measurement value obtained in the second measurement timing, and the average value of those measurement values so that those values are distinguishable.

Nishio et al disclose noncontact tonometer and further disclose the measurement timing determination means determines the measurement timing based on at least a peak point and a bottom point in the pulsation phase, and the intraocular pressure measurement means calculates an average value of a measurement value in a first measurement timing corresponding to the peak point and a measurement value in a second measurement timing corresponding to the bottom point; and output means which outputs the measurement value obtained in the first measurement timing, the measurement value obtained in the second measurement timing, and the average value

of those measurement values so that those values are distinguishable. See Column 6, lines 40-63; Column 7, lines 8-61; and Column 8, lines 46-53.

Since both Grolman et al and Nishio et al disclose means for adjusting intraocular pressure measurements based on the detected pulse of the subject, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Grolman et al to include the use of calculating the maximum and minimum pressure value as well as the average and displaying the calculated values, as per the teachings of Nishio et al, since it would provide a means of alerting the operator to the acquired values.

Allowable Subject Matter

5. The following is a statement of reasons for the indication of allowable subject matter: Claims 11-15 contain allowable subject matter, in particular, a pulsation phase shift detection means which obtains a phase shift between the pulsations detected by the first and second pulsation detection means respectively, as claimed in Claim 11; and an information means that informs that a period of the pulsation detected by the second pulsation detection means after determination of the measurement timing has changed, as claimed in Claim 15.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Szmaj whose telephone number is (571) 272-4733. The examiner can normally be reached on Monday-Friday, with second Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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